2021

Effective Research Presentations

Emily Faulconer
Embry-Riddle Aeronautical University, faulcone@erau.edu

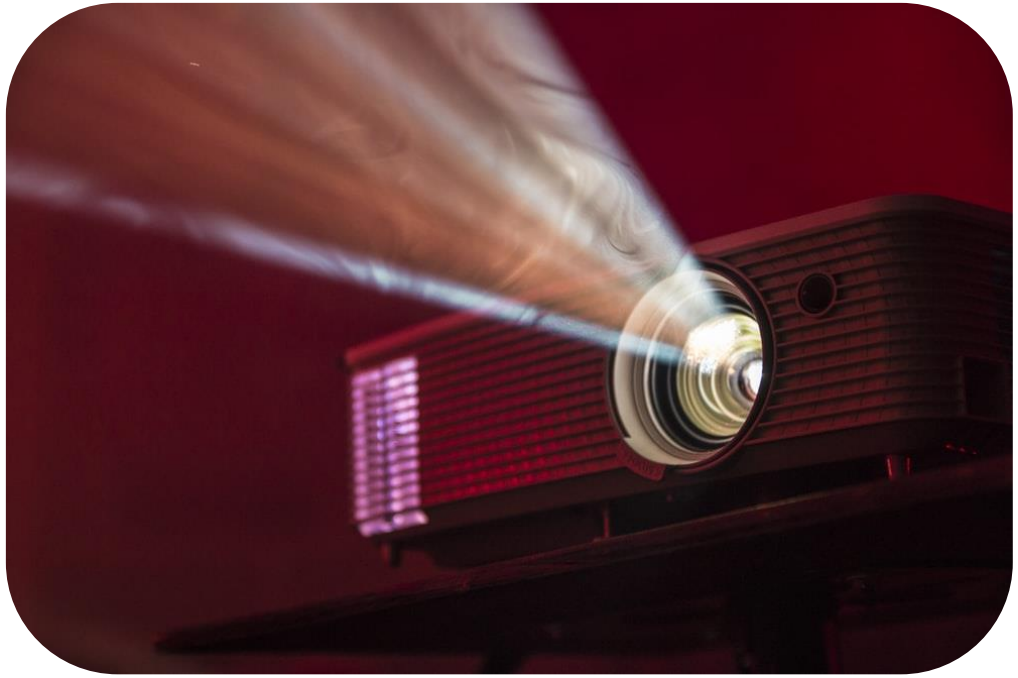
Jeremy Ernst
Embry-Riddle Aeronautical University, Jeremy.Ernst@erau.edu

Effective Research Presentations

Emily Faulconer & Jeremy Ernst

Posters and conference presentations share similar components.

- ✓ Background
- ✓ Research Question/Hypotheses
- ✓ Methodology
- ✓ Findings
- ✓ Conclusions



Key functions of posters and conference presentations are networking and reputation-building.

✓	form of academic expression
✓	summary of research
✓	visually-supported interaction

Step 1: Plan your approach.

- Identify sections
- Craft your key take-away(s)
- Determine what to represent visually

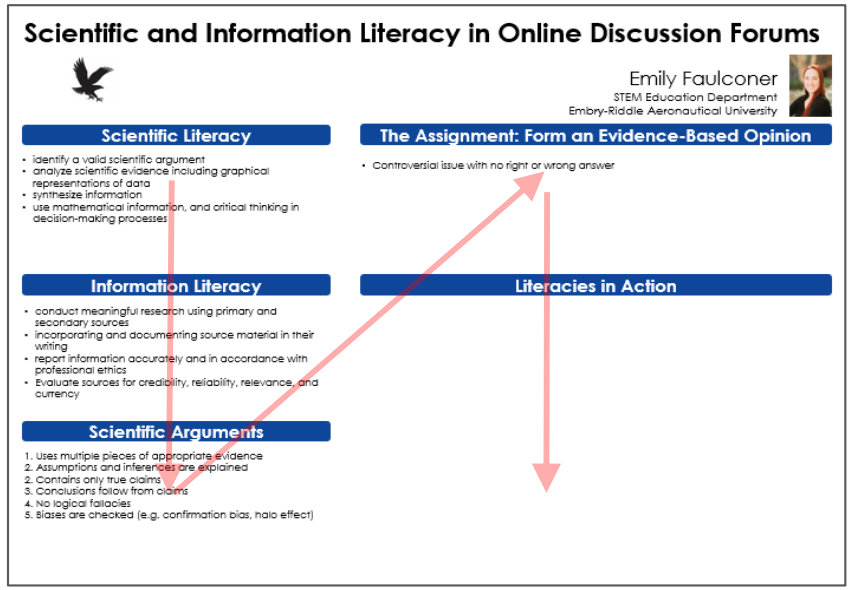
Step 2: Set up your first draft.

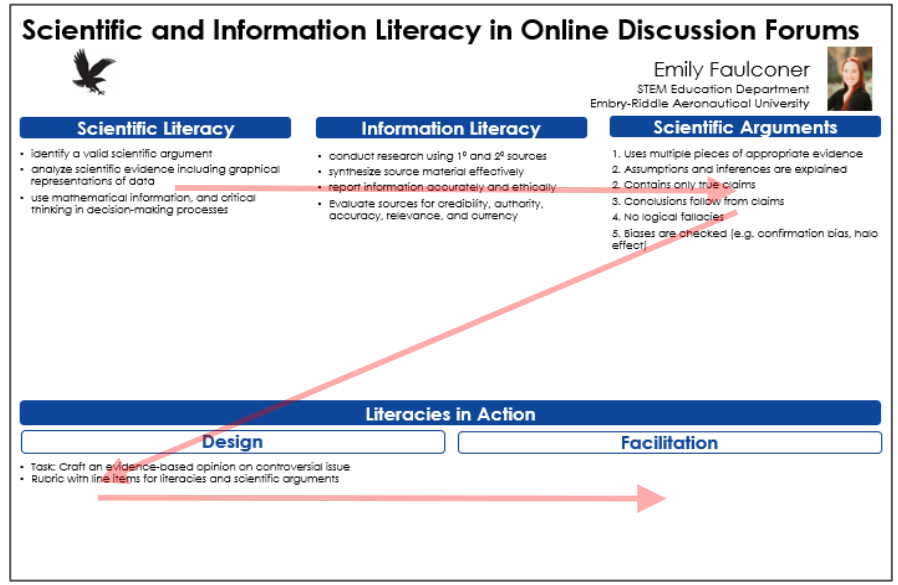
Presentation

- Assertion Evidence style

Poster

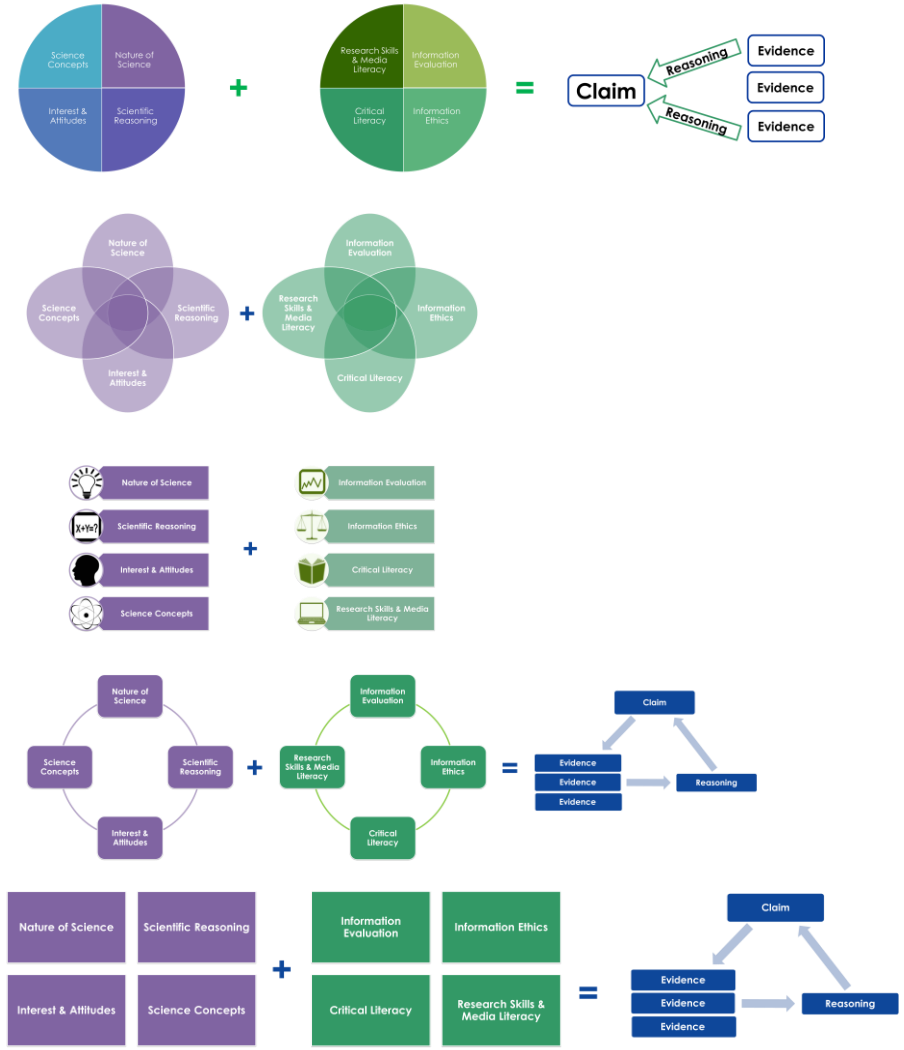
- CoAS Templates
- Layout & Flow





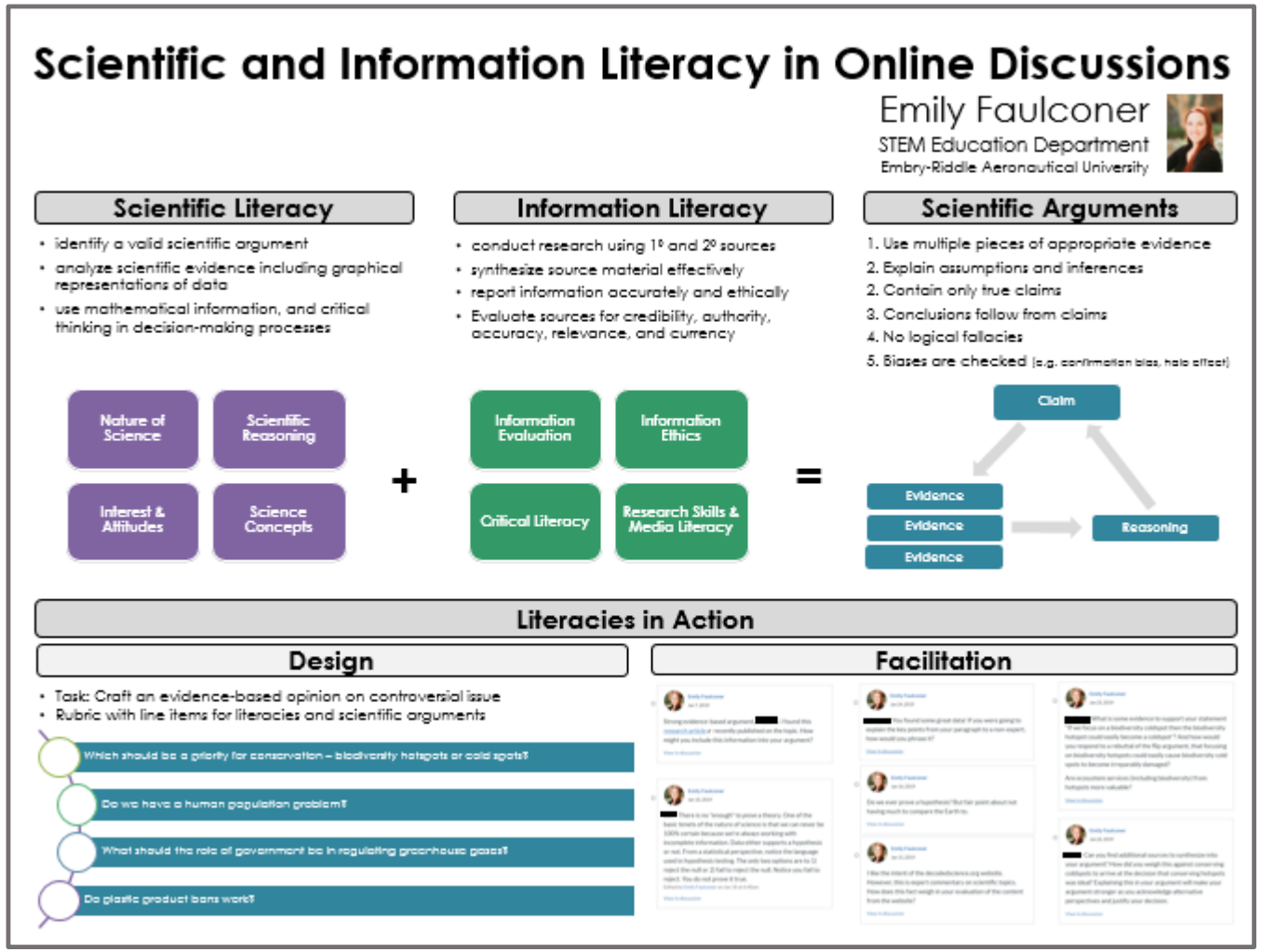
Step 3: Apply data visualization best practices.

- ✓ Choose an effective visual.
- ✓ Use the right tool to generate that visual.
- ✓ Adjust image for the poster platform.
- ✓ Make your message clear.
- ✓ Do not settle for default settings.
- ✓ Ensure your figures are not misleading.
- ✓ Declutter and simplify.
- ✓ Tell a story with your images.



Step 4: Focus your message.

- **Engaging, short title**
- Storytelling
- Visual hierarchy
  - ✓Size and scale
  - ✓Color
  - ✓Contrast
  - ✓Typographic Hierarchy
  - ✓Spacing
  - ✓Proximity
  - ✓Negative space
  - ✓Alignment
  - ✓Rule of odds
  - ✓Repetition

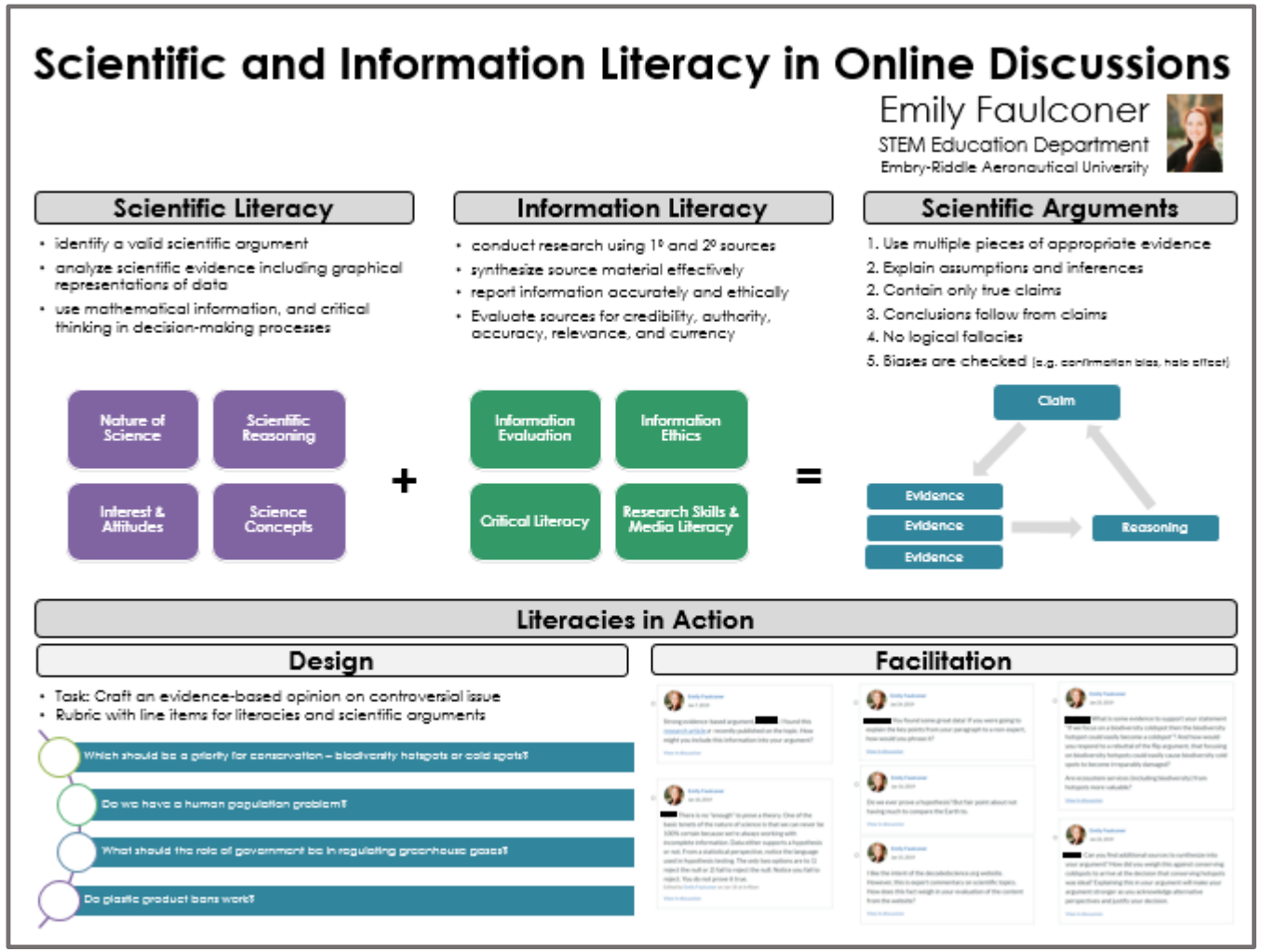


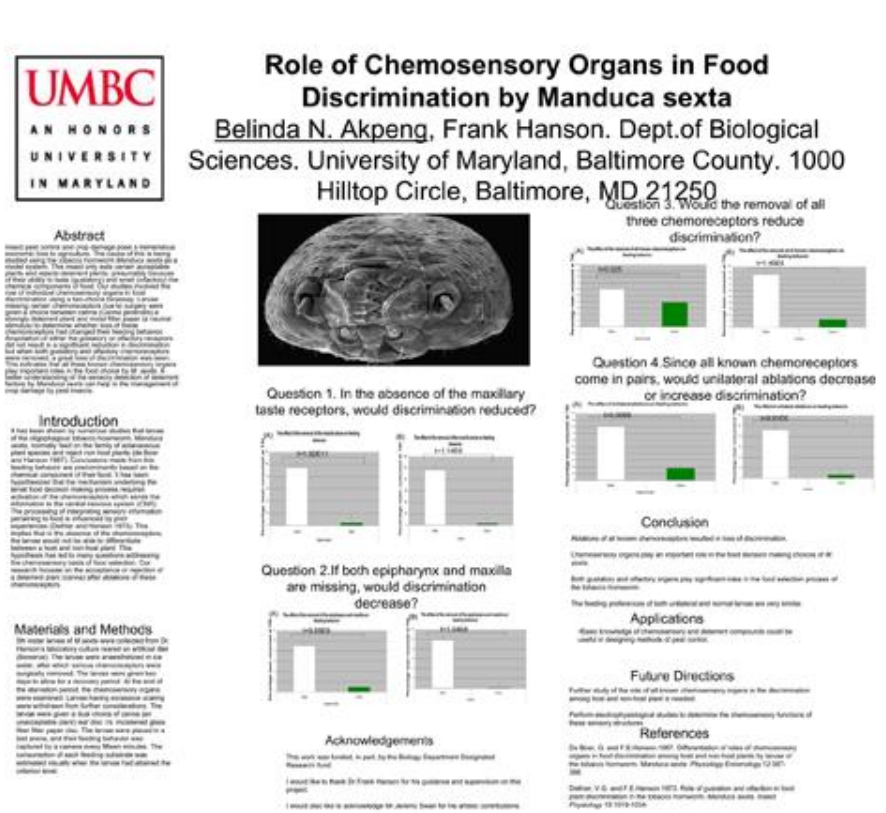
Step 4: Focus your message.

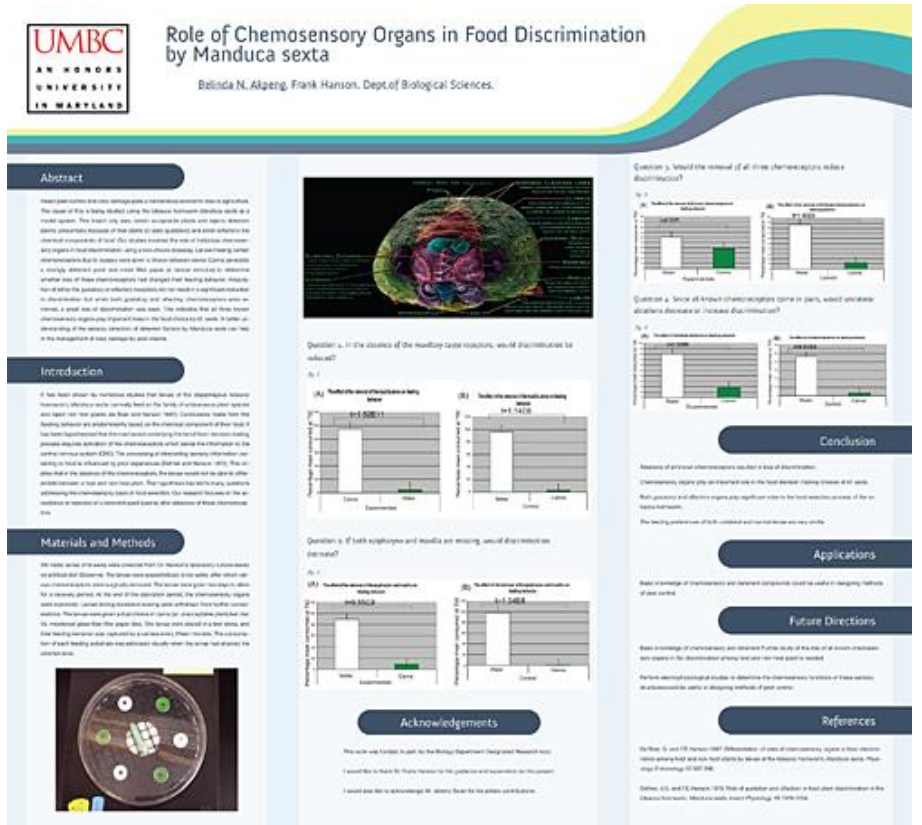
- Engaging, short title
- **Storytelling**
- Visual hierarchy
  - ✓Size and scale
  - ✓Color
  - ✓Contrast
  - ✓Typographic Hierarchy
  - ✓Spacing
  - ✓Proximity
  - ✓Negative space
  - ✓Alignment
  - ✓Rule of odds
  - ✓Repetition

Step 4: Focus your message.

- Engaging, short title
- Storytelling
- Visual hierarchy
  - ✓Size and scale
  - ✓**Color**
  - ✓Contrast
  - ✓Typographic Hierarchy
  - ✓Spacing
  - ✓Proximity
  - ✓Negative space
  - ✓Alignment
  - ✓Rule of odds
  - ✓Repetition

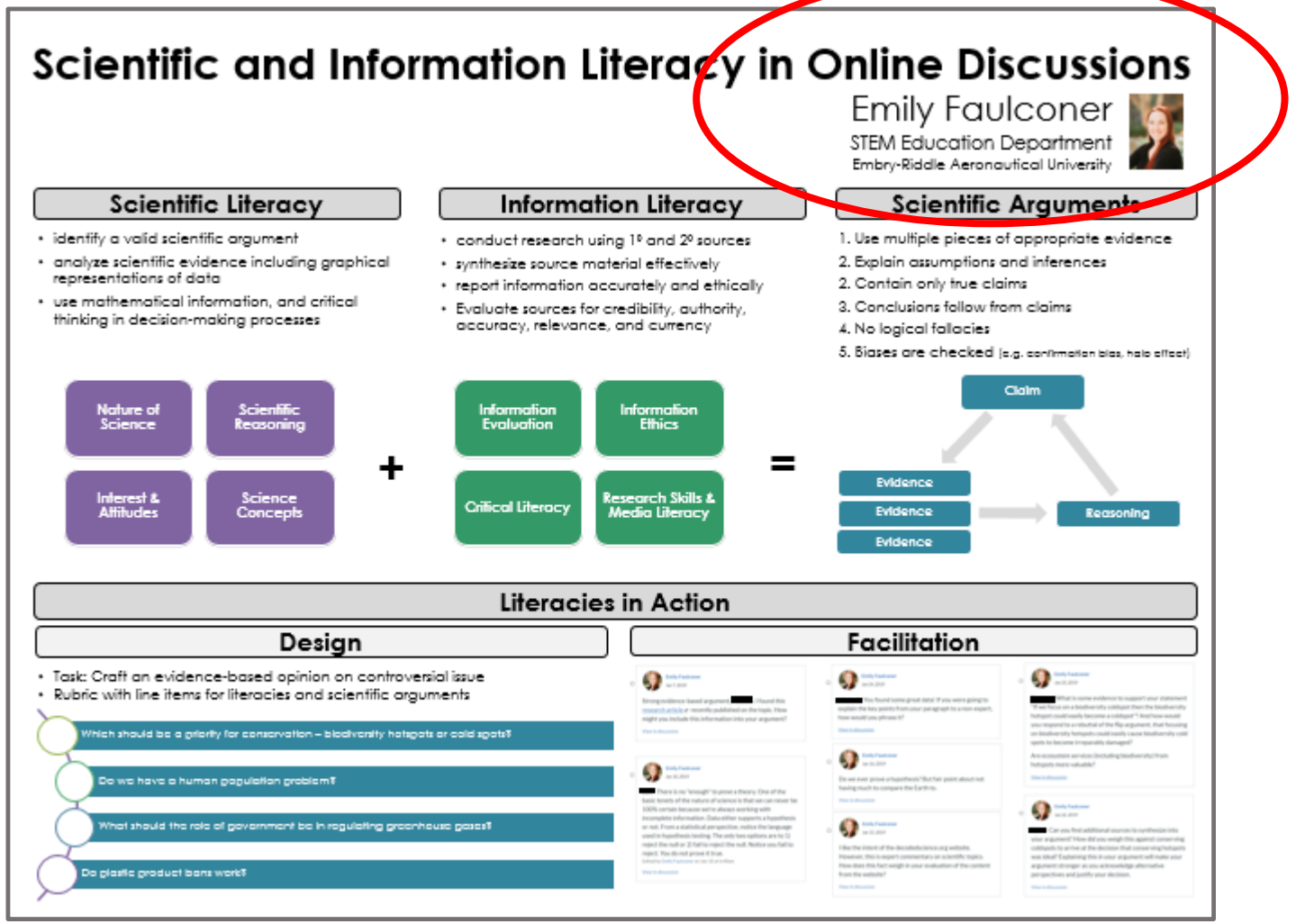



UMBC
AN HONORS UNIVERSITY IN MARYLAND
Role of Chemosensory Organs in Food Discrimination by Manduca sexta
Belinda N. Akpeng, Frank Hanson. Dept.of Biological Sciences. University of Maryland, Baltimore County. 1000 Hilltop Circle, Baltimore, MD 21250
Abstract
Introduction
Materials and Methods
Question 1. In the absence of the maxillary taste receptors, would discrimination reduced?
Question 2.If both epipharynx and maxilla are missing, would discrimination decrease?
Question 3. Would the removal of all three chemoreceptors reduce discrimination?
Question 4 Since all known chemoreceptors come in pairs, would unilateral ablations decrease or increase discrimination?
Conclusion
Applications
Future Directions
References
Acknowledgements


UMBC
AN HONORS UNIVERSITY IN MARYLAND
Role of Chemosensory Organs in Food Discrimination by Manduca sexta
Belinda N. Akpeng, Frank Hanson. Dept.of Biological Sciences.
Abstract
Introduction
Materials and Methods
Conclusion
Applications
Future Directions
References
Acknowledgements

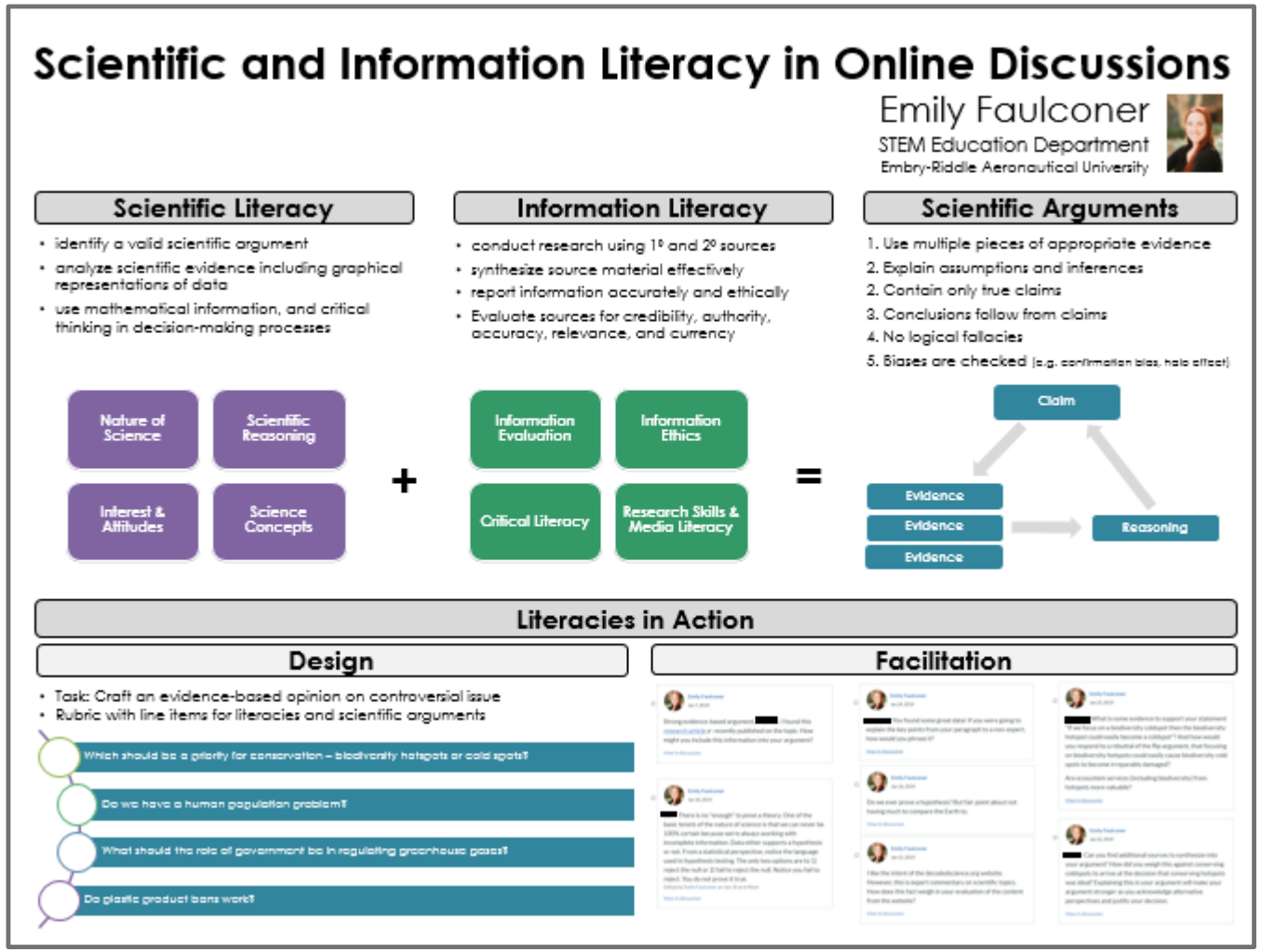
Step 4: Focus your message.

- Engaging, short title
- Visual hierarchy
  - ✓Size and scale
  - ✓Color
  - ✓Contrast
  - ✓**Typographic Hierarchy**
  - ✓Spacing
  - ✓Proximity
  - ✓Negative space
  - ✓Alignment
  - ✓Rule of odds
  - ✓Repetition



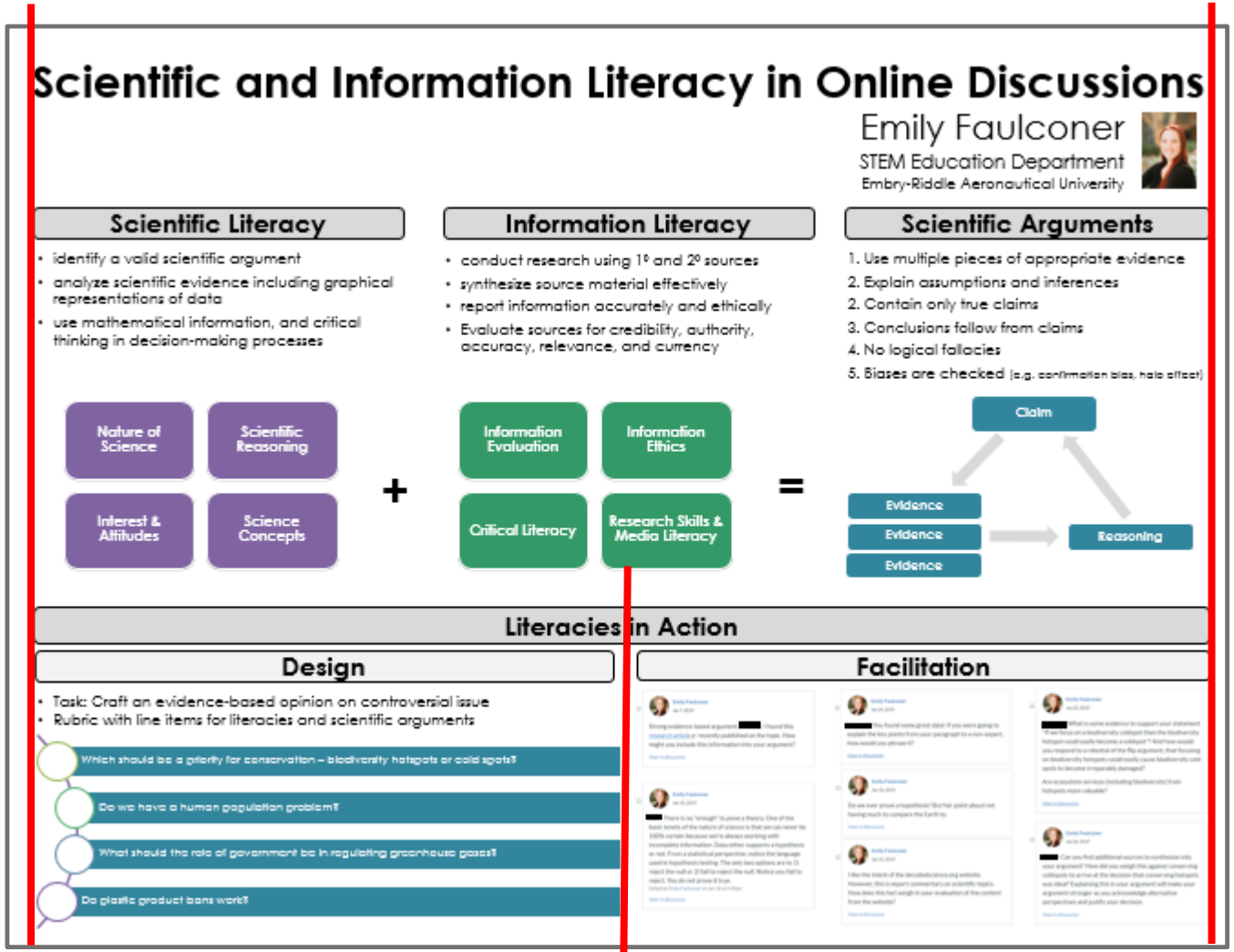
Step 4: Focus your message.

- Engaging, short title
- Visual hierarchy
  - ✓Size and scale
  - ✓Color
  - ✓Contrast
  - ✓Typographic Hierarchy
  - ✓Spacing
  - ✓Proximity
  - ✓**Negative space**
  - ✓Alignment
  - ✓Rule of odds
  - ✓Repetition

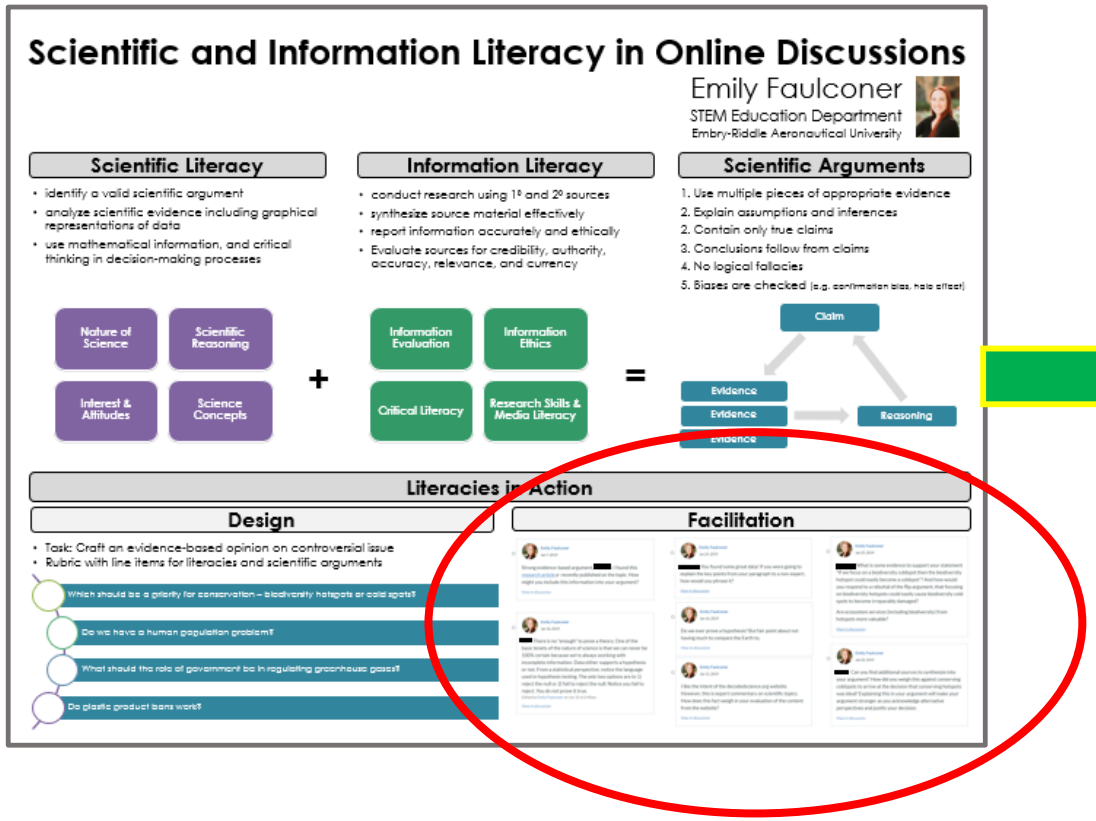


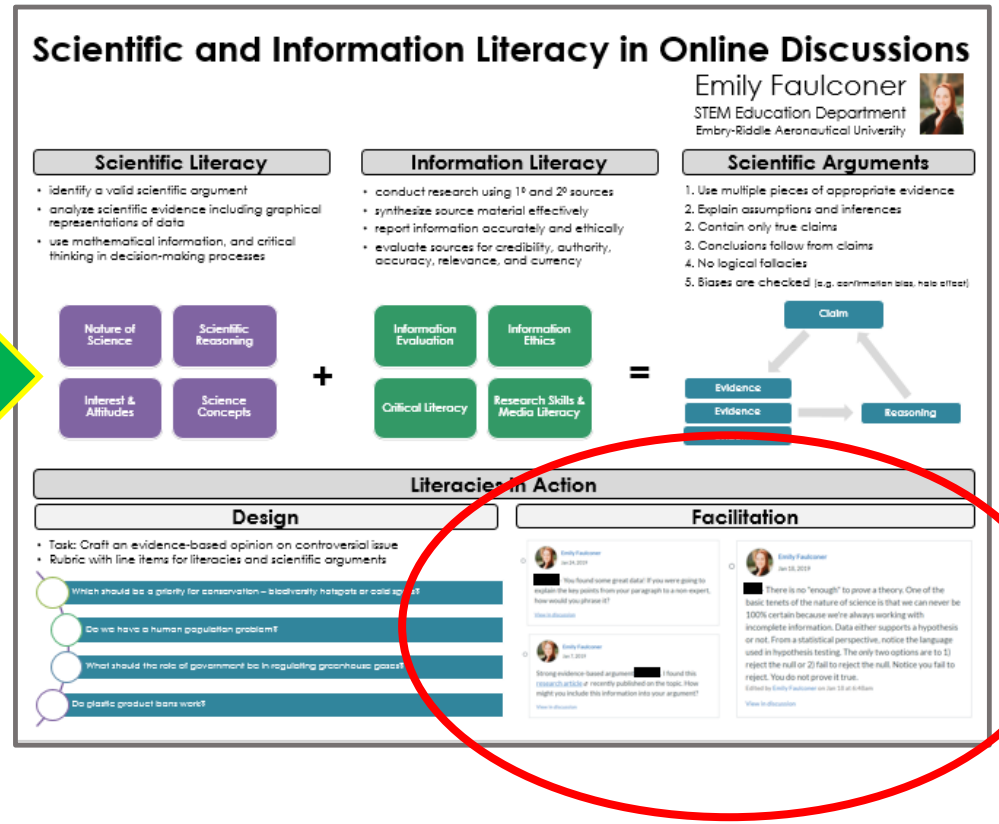
Step 4: Focus your message.

- Engaging, short title
- Visual hierarchy
  - ✓Size and scale
  - ✓Color
  - ✓Contrast
  - ✓Typographic Hierarchy
  - ✓Spacing
  - ✓Proximity
  - ✓Negative space
  - ✓**Alignment**
  - ✓Rule of odds
  - ✓Repetition



Step 5: Keep it simple.





Step 6: Get creative with it.

Posters

- Multimedia
- Hidden panels
- Doodle space (transparency film)

Presentations

- Active learning strategies
- Interactive components
- Open strong. Close strong

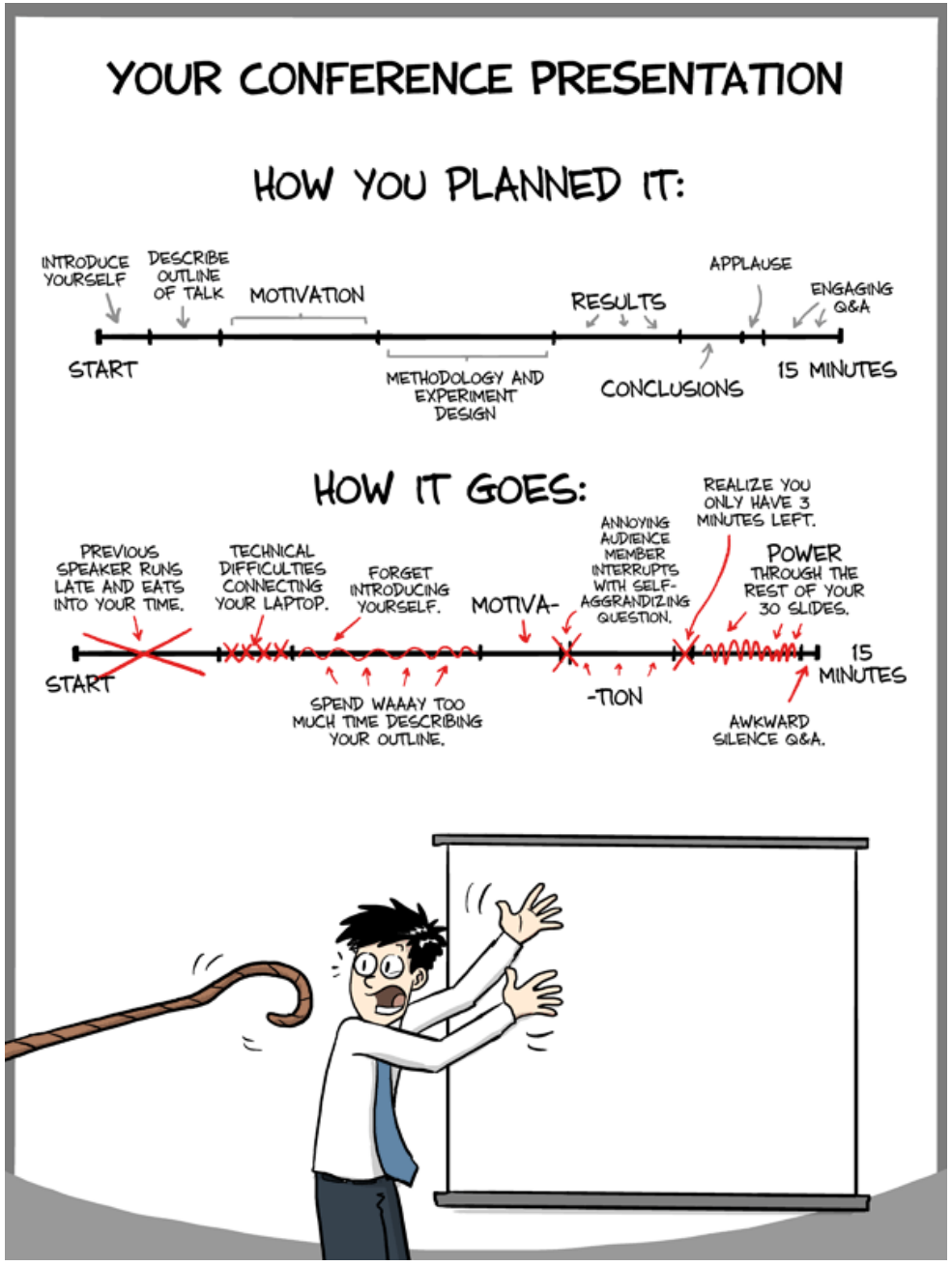
What are some ideas you've seen?

Step 7: Prepare to present.

- ✓ Practice. Practice. Practice. Repeat.
- ✓ Brainstorm questions
- ✓ Print your poster
- ✓ Prepare your supplemental materials
  - ✓ handouts
  - ✓ business cards
  - ✓ push pins and tape
  - ✓ white out and pen to correct tybos

In Review

- **Networking and name-recognition** occur through posters and presentations.
- **Focus your message** using data visualization and graphic design best practices.
- **Keep it simple.**



http://phdcomics.com/comics/archive.php?comicid=1553

https://www.surveymonkey.com/r/PostersPresentations